



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,663	01/14/2002	Ping-Ho Chen	JCLA8068	5273

23900 7590 08/01/2005

J C PATENTS, INC.  
4 VENTURE, SUITE 250  
IRVINE, CA 92618

EXAMINER
----------

PALADINI, ALBERT WILLIAM

ART UNIT	PAPER NUMBER
----------	--------------

2125

DATE MAILED: 08/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/047,663

Applicant(s)

CHEN, PING-HO

Examiner

Albert W. Paladini

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

22

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Referring to figure 4, which describes the methodology of the invention, lines 14 through 17 explain that the contents of the calculator memory is cleared. Then line 18 states, "The servo type is consequently determined." The term "consequently" indicates that the determination of the servo type follows logically from the previous step. However, the first step was clearing the contents of the calculator memory. This does not lead to a determination of a servo type, and there is not step in figure 4 in which a servo type is determined.

Appropriate correction and clarification is required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

#### **Claim 1**

The preamble recites "A method in reducing a size in designing a servo system simulation program". The phrase "reducing a size" is not understood. The specification uses the phrase "reducing a size" on pages 2 and 3 in the Summary of the Invention, but does not explain what it means. On page 3, the specification discusses reducing the memory usage of the programmable calculator, but does not explain what "reducing a size" in designing a servo system means.

#### **Claims 2 and 3**

The claims recite, "The servo type is a type of a Laplace transfer function". A servo or servomechanism is a physical feedback system, so it cannot be a type of mathematical function.

#### **Claim 5**

The first step recites, "increasing the number of executions by one". This claim is dependent upon claim 1, and there is no antecedent basis for "executions." The claim must specifically recite which steps in claim 1 constitute an execution.

### **Claim 6**

This claim recites, "the servo type uses the state variable generated out in the previous calculation". Since numerous steps are contained in claim 1 and claim 5, it is not understood which step entails the "previous calculation."

Appropriate correction and clarification is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Georgis (4533991).

This rejection was made by addressing the claim limitations, which were understood.

Georgis discloses a method and system of modifying the control signal of a servo system. As demonstrated on lines 44 to 57 in column 1, the control system minimizes the error between the measured and desired values. Lines 58 to 68 in

Art Unit: 2125

column 1 teach the ability of providing a step function as an input to the system and also integrating the step function to generate a ramp function.

7. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Singhouse (5638267).

This rejection was made by addressing the claim limitations, which were understood.

Singhouse discloses a method and apparatus for minimizing unwanted dynamics in a physical system. On lines 43 to 54 in column 35, Singhouse the use of input shaping to minimize the unwanted dynamics, and on lines 51 to 65 in column 7, teaches the shaped input which combines the step and ramp functions.

***Relevant Prior Art***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2125

Gooch (5189572) discloses a system for magnetic control of a transducer, which utilizes a variable speed servo and where inaccurate tracking is minimized by using combined ramp and step functions.


McConnel (5594309) discloses a robot control scheme, which uses a servo control, which minimizes robot response time and the resulting residual vibration through the use of a three-step process with a ramping function.

9. Any inquiry concerning this communication or earlier communication from the examiner should be direct to Albert W. Paladini whose telephone number is (571) 272-3748. The examiner can normally be reached from 7:00 to 3:00 PM on Monday, Tuesday, Thursday, and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Leo P. Picard, can be reached on (571) 272-3749. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

July 28, 2005

  
Albert W. Paladini  
Primary Examiner  
Art Unit 2125